

ABSTRACT

A high quality ink jet recording medium is formed of a dimensionally stable absorbent paper base sheet and a coating that is primarily a reaction product of polyvinyl alcohol and boric acid. The reaction product has molecule bonds that are principally polyvinyl alcohol-boric acid-polyvinyl alcohol bonds which, when applied to the substrate, form a three-dimensional sieve or screen-like coating facilitating penetration to the absorbent base-sheet of ink carrier vehicle and holding out on the sieve or screen the ink pigments and colorants. The coating facilitates manufacture of a high quality recording medium of exceptionally low cost, ideally suited for high-speed multicolor ink jet printing in continuous web form. Methods of making the coating and the medium are disclosed.